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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,471	04/27/2006	Yuji Iwaki	07/56-7673	4788
31780	7590	09/28/2009	EXAMINER	
ERIC ROBINSON			WILSON, MICHAEL H	
PMB 955			ART UNIT	
21010 SOUTHBANK ST.			PAPER NUMBER	
POTOMAC FALLS, VA 20165			1794	
			MAIL DATE	DELIVERY MODE
			09/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Attachment to Advisory Action

1. The after Final Response dated 09 September 2009 will be entered however the amendment fails to place the application in condition for allowance.
2. Applicant's arguments filed 09 September 2009 have been fully considered but they are not persuasive.

Applicant argues that Sato does not teach or suggest that the "metal oxides such as vanadium oxide, ruthenium oxide and molybdenum oxide" from the anode buffer layer could or should be added to the hole-transporting layer including aromatic diamines, aromatic amines and/or spiro compounds, or vice-versa. However Sato et al. clearly teaches that compounds suitable for the hole transporting layer possess a small ionization potential, high hole mobility, and excellent stability [0172], and that vanadium oxide, ruthenium oxide, and molybdenum oxide are disclosed to have small ionization potential, high hole mobility, and excellent stability ([0211]-[0212]). Therefore given that Sato et al. teach vanadium oxide, ruthenium oxide, and molybdenum oxide to meet the requirements of a suitable hole transport material the reference suggests these metal oxides as suitable. Further the reference gives one of ordinary skill in the art motivation to combine the metal oxide into the hole transport layer by teaches that the metal oxides lower initial driving voltage, suppress the voltage elevation on continuous driving, and improve adhesion [0211].

Applicants also argue that there is no proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art, to modify Sato and Shiratsuchi or Shiota or to combine reference teachings to achieve the claimed invention, and asserts that the Official Action has failed to carry this burden of factually supporting any *prima facie* conclusion of obviousness. However as noted above the Office Action clearly cites motivation and rationale supporting a *prima facie* case of obviousness. Further applicants assert that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention. However the Action gives explicit reasoning including motivation found in Sato et al.

Applicants further argue that the Action does not use specific support from the references (Sato or Shiratsuchi or Shiota) or establish the level of ordinary skill in the art at the time of the present invention. However even within text cited by applicants (last paragraph page 4 of the remarks) the Office Action specifically cites from Sato et al. and asserts that the combination would be within the level of ordinary skill at the time of the invention. Applicants give no reasoning to rebut the Action's assertion that the combination would be within the level of ordinary skill.

Finally applicants argue that the Action does not present reasons why one of ordinary skill in the art at the time of the present invention would have added the "metal oxides such as vanadium oxide, ruthenium oxide and molybdenum oxide" from the anode buffer layer of Sato to the hole-transporting layer, or vice-versa, and that the Action has not provided a reasonable nexus from the prior art itself or within the level of ordinary skill in the art that would lead one to the conclusion that it was merely an obvious variation of Sato to add the "metal oxides such as vanadium oxide, ruthenium

oxide and molybdenum oxide" from the anode buffer layer 3 of Sato to the hole-transporting layer 4 including aromatic diamines, aromatic amines and/or spiro compounds, or vice-versa. However as noted earlier the Action gives specific reasoning within the level of ordinary skill and specifically from the cited references. Further it is well known that the properties of a layer are a result of the materials used in the layer, applicants give not reasoning why one of ordinary skill would not reasonably expect the cited metal oxides to behave similarly (i.e. lower initial driving voltage, suppress the voltage elevation on continuous driving, and improve adhesion) when combined with another hole transport material.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL WILSON whose telephone number is (571) 270-3882. The examiner can normally be reached on Monday-Thursday, 7:30-5:00PM EST, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1794

MHW